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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/765,924      | 01/20/2001  | Jerry A. Dukes       | 5603.02             | 8271             |

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DORSEY & WHITNEY, LLP  
INTELLECTUAL PROPERTY DEPARTMENT  
370 SEVENTEENTH STREET  
SUITE 4700  
DENVER, CO 80202-5647

EXAMINER

DUNWOODY, AARON M

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

3679

DATE MAILED: 09/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/765,924

Applicant(s)

DUKES ET AL.

Examiner

Aaron M Dunwoody

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 July 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-19 is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other:  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent 5480196, Adams, Jr. in view of US patent 4752208, Iwata et al.

In regards to claim 1, Adams, Jr. discloses a pipe connection joint structure comprising opposing bell-formed (shaped) ends (66, 68); a connector insert (62) defining opposing ends and a push-ring (64); at least one gasket (30) positioned on at least one of the opposing ends of the connector insert; and wherein the opposing ends of the connector insert are positioned in the bell-formed ends, with the at least one gasket forming a seal therebetween. Adams, Jr. does not disclose corrugated pipe. Iwata et al teaches the use of corrugated pipe (1) for flexibility while maintaining relatively light in weight and allowing water to smoothly flow therethrough (column 1, lines 20-23). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide corrugated piping for flexibility while maintaining relatively light in weight and allowing water to smoothly flow therethrough, as taught by Iwata et al.

In regards to claim 2, Adams, Jr. discloses the opposing ends of the connector insert being substantially equal in length to the length of the opposing bell-formed ends.

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In regards to claim 3, Adams, Jr. discloses the connector insert further comprising at least one flange having a diameter DS proximate to the at least one gasket.

In regards to claim 4, Adams, Jr. in view of Iwata et al discloses the claimed invention except for the push-ring having a thickness of at least 0.25 inches. It would have been obvious to one having ordinary skill in the art at the time the invention was made to fabricate the push-ring with a thickness of at least 0.25 inches, since the optimization of proportions in a prior art device is a design consideration within the skill of the art. In re Reese, 290 F.2d 839, 129 USPQ 402 (CCPA 1961).

In regards to claim 5, Adams, Jr. discloses at least one gasket positioned on each of the opposing ends of the connector insert.

In regards to claim 6, Adams, Jr. discloses the seal being a watertight seal.

In regards to claim 7, Iwata et al discloses the two sections of corrugated pipe having an outer diameter of  $D_y$  and an inner diameter of  $D_i$  and the opposing bell-formed ends have an outer diameter of  $D_o$  and an inner diameter of  $D_b$ .

In regards to claim 8, Adams, Jr. in view of Iwata et al discloses the push-ring of the connector insert having an outer diameter substantially equal to  $D_o$ .

In regards to claim 9, Adams, Jr. discloses the at least one gasket having an outer diameter greater than  $D_b$ .

In regards to claim 10, Adams, Jr. in view of Iwata et al discloses a corrugated pipe connector insert comprising a pair of opposing ends each defining an outer diameter; at least one gasket positioned on at least one of the opposing ends having an

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outer diameter greater than the outer diameter of the opposing ends; and a push-ring disposed between the opposing ends having an outer diameter substantially equal to an outer diameter of the bell formed ends.

In regards to claim 11, Adams, Jr. in view of Iwata et al discloses the claimed invention except for the push-ring having a thickness of at least 0.25 inches. It would have been obvious to one having ordinary skill in the art at the time the invention was made to fabricate the push-ring with a thickness of at least 0.25 inches, since the optimization of proportions in a prior art device is a design consideration within the skill of the art. In re Reese, 290 F.2d 839, 129 USPQ 402 (CCPA 1961).

In regards to claim 12, Iwata et al discloses at least one flange having a diameter  $D_s$  proximate to the at least one gasket.

In regards to claim 13, Adams, Jr. discloses at least one gasket positioned on each of the opposing ends of the connector insert.

In regards to claim 14, Adams, Jr. discloses the push-ring having a diameter of no more than approximately one inch greater than  $D_s$ .

In regards to claim 15, Adams, Jr. discloses at least one channel (26-28) formed between adjacent flanges, the at least one gasket being positioned in at least one channel.

In regards to claim 16, Adams, Jr. discloses at least one groove formed on the insert, the at least one gasket being positioned in the at least one groove.

***Allowable Subject Matter***

Claims 17-19 are allowed.

***Response to Arguments***

Applicant's arguments filed 7/9/02 have been fully considered but they are not persuasive. The applicant argues:

...independent claims 1, 10, and 17 of the present invention involves 'bell-formed ends' in two sections of corrugated pipe. One embodiment of the invention involving bell formed ends is described in the subject application at page 6, lines 5-25.

The examiner notes, in regards to independent claims 1 and 10, the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight, and the limitations of the claims are met.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron M Dunwoody whose telephone number is (703) 306-3436. The examiner can normally be reached on Monday - Friday between 7:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H Browne can be reached on (703) 308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

.amd  
September 9, 2002



**Lynne H. Browne**  
**Supervisory Patent Examiner**  
**Technology Center 3670**